

ABSTRACT

Disclosed are a medical material for use in therapeutic agent delivery to a tooth or periodontal tissue, and an agent delivery apparatus for delivering a therapeutic agent to a tooth or periodontal tissue, by means of ultrasonic energy with less damage to the tooth or periodontal tissue. The medical material comprises a mixture of microbubbles and a therapeutic agent consisting of at least one of a plasmid DNA and a drug with a therapeutic effect on a tooth or periodontal disease. The agent delivery apparatus comprises an ultrasonic transducer having a tip provided with a detachable ultrasonic emitter for emitting an ultrasonic wave to a target site of a tooth or periodontal tissue, and a medical-material ejecting device for supplying the medical material to the target site.